Public Address - Voice Alarm

IPVA - Intercom

Commercial Audio

Intelligent Acoustic Solutions

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HELPROD.COM - Product pictures; Robert Peek Fotografie - References pictures : ATEÏS GROUP - Brisjo - Helprod.com

DELIVERING YOUR MESSAGE

ATEÏS

Public Address - Voice Alarm

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Our IDA8 systems for Public Address and Voice-Alarm are complying with the EN 54-16 and are combining full flexibility with state of the art functionality.

A true example of how modern technology combines with years of field experience.

PUBLIC ADDRESS - VOICE ALARM

IDA8

DELIVERING YOUR MESSAGE

IDA8

COMPACT AUDIO SYSTEM - EN 54-16 compliant

ATEÏS which boosts 30-years of experience in the research and development of Public Address and Voice Evacuation systems now introduces a new system that perfectly integrates Fire-Alarm with Voice-Alarm according to the EN 54-16 (VACIE&FACIE), BS 5839-part 8 and the ISO 7240-16. ATEÏS has developed and will continue developing dedicated systems for Voice-Alarm applications.

The IDA8 is a third generation modular system that complies with current architectural demands that nowadays require IP-and/or Fiber-optics Networking to cover for any complex design possible. IDA8 responds to Public Address and Voice Alarm requirements stated in the EN 54-16, ISO 7240-16 and BS 5839/8, compliance for large installation and installations with specific purpose.

IDA8

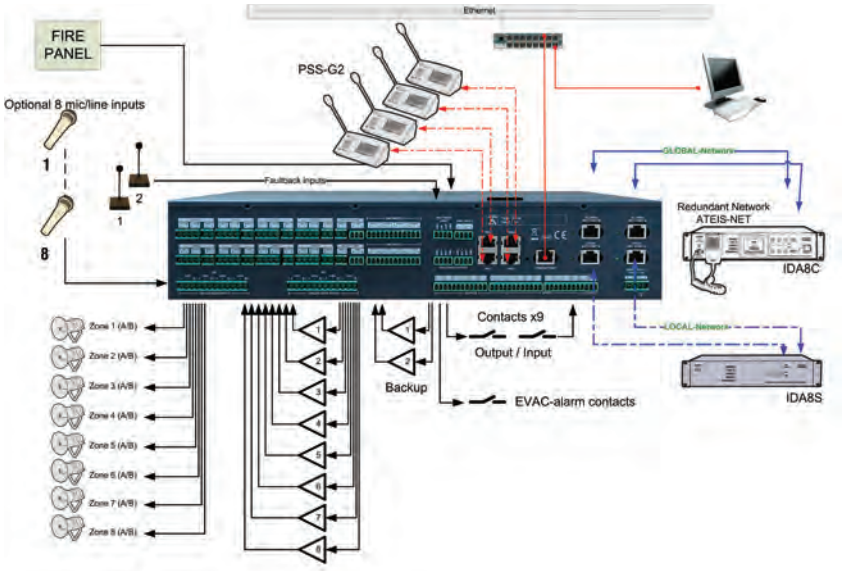
The IDA8 module unit houses: Audio digital signal processing (DSP), matrix control functions, digital message player. Front panel access with; fully monitored fireman microphone, emergency message trigger button(s).

Amplifier monitoring with hot-swap amplifiers, loudspeaker line impedance, line monitoring. It can support up to four PSSxx security microphone consoles with colour touch pad and up to eight to two backup and end-off 0 dB audio inputs and outputs into 8 different zones per unit with A/B-line detection according to the **BS 5939-part 8**.

Slave units can extent the system configuration with an additional 8 inputs and 8 outputs. The slave units are available with A/B-line detection (**IDA8S-AB**), or single zone line detection (**IDA8S**).

Each input and output channel is fitted with wide range of pre-and post-processing devices such as; volume controllers, routing mixers and switches, priority and paging components, equalizers, compressors, limiters, delay-lines, etc.

Up to 4 hours of digital messages can be stored providing live-recording and external files can be uploaded (WAV) from a computer into **IDA8**. Up to 8 messages, in a single **IDA8 unit** and 64 messages in an **IDA8 system**, can be played simultaneously into different zones.



IDA8 enables operators to see a detailed overview of the operational status of the entire PA-system with a single push on a button. **IDA8** is able to run an impedance scan of all components connected to it, covering not only the input paging consoles but including connectors, cabling, processing blocks such as compressors and limiters, delay-lines and the network and loudspeakers. It stores a reference measurement of the system as it exists in a given configuration and environment. This reference is subsequently stored in the system. Any alterations towards this reference will be reported and logged in an event-log-file. User definable thresholds can be applied to these references allowing for customization of the system's supervision for specific use.

Being **EN 54-16/ISO 7240-16 and BS 5839 part 8** security systems, all components and peripherals are monitored. All incidents are reordered into a data file which can be consulted on the master module monitor display or on a PC using the **ATEÏS Studio** remote control software. Also, any detected fault is signalled by a general fault output contact available on the master unit. A built-in loudspeaker output enables selective listening to all the sources and system's 100 V output signals.
IDA8 is easily configured with our PC based **ATEÏS-Studio** global software (Window compatible). Software access can be password protected. Once programmed, the system will be able to work independently (off-line) without the need of a PC to be connected.

IDA8 CHARACTERISTICS

- Interfaces: Standard Local Networking, 2 x RJ45. 100 m.
- Ethernet interface, TCP/IP, MODBUS, VOX@NET and 3rd part such as LAP.
- 4 x Security microphone connection, RJ45, PC1 to PC4 supports: MODBUS, VOX@NET and 3rd part such as LAP.
- 8 balanced audio inputs
- 8 balanced audio outputs + 2 audio outputs for back-up amplifiers.
- Return 100 Volt lines input from amplifiers.
- Outgoing 16 (8+8) 100 Volt lines to the loudspeakers. (AB-zoning)
- Optional 8 mic/line audio inputs
- 9 logic inputs and 8 logic outputs
- Security contacts for: Evacuation and fault reporting and fault-back inputs.

IDA8 Slave

COMPACT AUDIO SYSTEM, EN 54-16 compliant

The IDA8 Slave-audio expander is used if a system requires additional audio inputs and outputs, additional security microphone consoles or switching contacts. The unit provides 8 audio input channels, 8 audio output channels and an additional 4 links for security microphone consoles, type PSSG2.

The **ID8-slave** comes in two versions:
1. **IDA8S-AB**, this one has 8 audio-outputs for A/B-zoning according to the BS5839-part8
2. **IDA8S**, this one has 8 audio outputs for single zoning.

The Network cards that comes with the unit provides a redundant 64-channels audio and data connection, **ATEIS-NET**, between one Master and a maximum of 32 **IDA8-slave** units in one rack system.

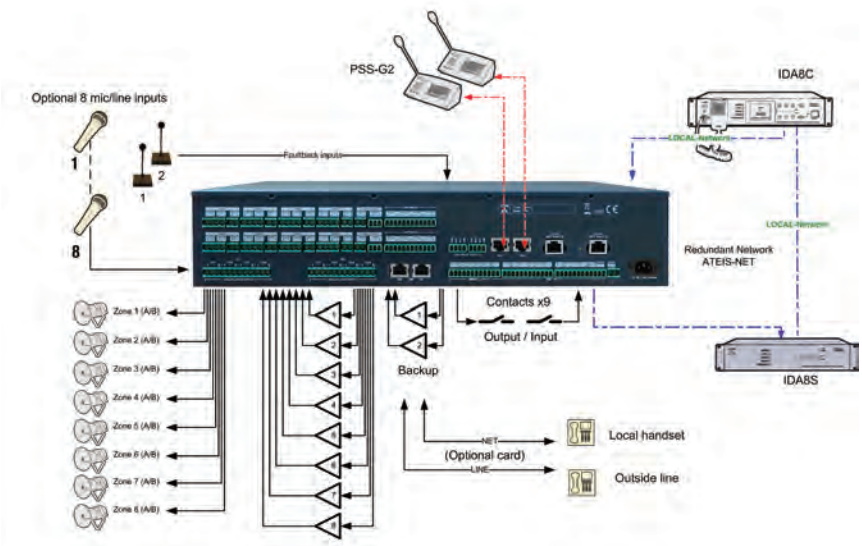
Alternatively, if a bigger installation distance between devices is required, the existing RJ45 redundant connection can be exchanged for the optional Fibre-optic **IDA-NET-cards** increasing distance up to 2 km between master and slave or between slave and slave.

IDA8S-AB

8 balanced 0 dB audio inputs and 8 balanced 0 dB audio outputs, 4-security microphone access points, control inputs and outputs. Comes standards with **IDA NET-card 1**. **BS 5839** compliant with A/B zoning.

IDA8-S

8 balanced 0 dB audio inputs & 8 balanced 0 dB audio outputs, 4-security microphone access points, control inputs and outputs. Comes standards with **IDA NET-card 1**.



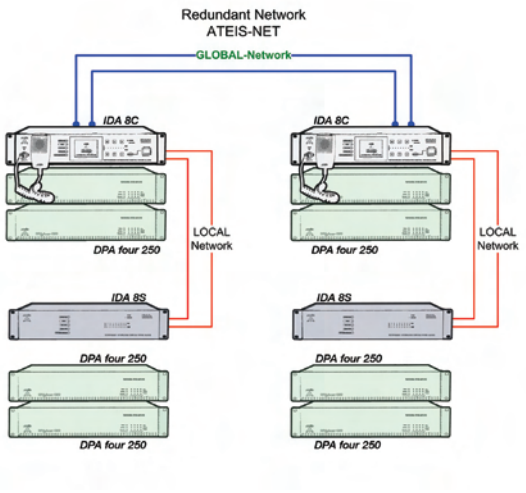
IDA8 Features

- The IDA8-Master system controller has 8 analogue audio inputs and 8 analogue audio outputs. The outputs have selectable 18 or 20 kHz monitoring signal for end-off-line monitoring or, using defined monitoring windows, individual monitoring with an accuracy of up to 5% of the total line load.
- 8 alarm control inputs and 8 output relays are freely programmable for system actions and priorities can be assigned to these inputs.
- An optional 8 microphone/line input card can be added and used as call inputs.
- The ATEIS-NET network allows for additional audio break in and out boxes, TCP/IP call stations, etc.
- The IDA8 networking, ATEÏS-NET, is designed for redundant network cabling.
- LOCAL Network: The system is designed to handle up to 256 priorities, can be configured for up to 256 zones (512 AB) in the LOCAL Network.
- GLOBAL Network: The system can connect up to 32 IDA8-Masters over the Global Network allowing a system configuration of up to 32 x 256 zones.
- The IDA8-Master can work independently without a PC connected to it. The PC can be disconnected after configuring the system.
- The front panel colour touch-screen display and corresponding push buttons allows for simple navigation through the various system menu's.
- Automatic messaging is included in the Master and Slave units with a capacity of up to 4 hours of WAV format audio files. The audio messages can be uploaded via Ethernet link.
- 8 audio streams can be activated at the same time.
- The message player and messages are monitored.
- Full monitoring is provided starting at the capsule of a call station microphone to the end of a loudspeaker line. The external cables connected to the control inputs are monitored for short and open circuit.
- Standard test, alarm and chime-tones are stored in the Master and Slave unit(s).
- The Master and Slave devices have an internal real time clock for automatic scheduled activities like; playback of messages, automatic volume changes during day and night or background music settings
- All IDA-units have extensive audio pre- and post processing possibilities for audio inputs and audio outputs.

NETWORKING

COMPACT AUDIO SYSTEM - EN 54-16 compliant

The IDA8 series is made for medium to large-sized installations, such as shopping malls, retail stores, trainstations, airports, etc. The IDA8 has an open design architecture and interfaces with remote devices such as paging consoles, audio break-in and break-out convertors and room-controllers. ATEÏS has developed its own audio networking system ''ATEÏS-NET''



The systems architecture is based on two redundant 'daisy-chain' methodes. A so called **Local Network** and a so called **Global Network**.

- The LOCAL Network daisy-chains up to 32 Master IDAC's, creating a true audio matrix of 256 x 256 over a full redundant network (RJ45).

- The GLOBAL Network daisy-chains up to 32 Master IDAC's over a GIGA-bit open network. This GLOBAL Network is used to create a redudant link between **IDA8-systems**. The size of such a system can reach up to a multiple of 256 x 256 inputs and outputs.

For interfacing between Masters and Masters, Master and Slaves, **ATEIS** has developed a dedicated audio and data hardware application, **ATEIS-NET**, with proprietary low-latency protocol.

ATEIS-NET cards are available for copper (RJ45) and fiber-optic, creating dedicated network distances of up to 20 kilometers. Further interfacing are included using TCP/IP for third party interfacing with PC-based remote controller, Terracom IP-media streamers and TCP/IP paging and operating consoles. Serial RS485 and RS232 connections supporting Modbus, Vox@Net and thrid-party protocols like LAP are available on the units.

ATEÏS Network devices:

IDA8C & IDA8S, NET cards

This Ethernet based network is able to simultaneously transport 64 audio channels (32 bits, 48 kHz sampling rate) with a latency < 1 msec together with the necessary control data over a CAT5 or Fiber-optic dedicated network.

For the **LOCAL and GLOBAL system networking,** optional **ATEÏS-NET networking cards** can be added inside the **IDA8C and IDA8S**.

Thanks to its loop architecture, the **ATEÏS-NET** audio network is fully redundant. If a problem (Line open or shorted) occurs on a loop segment, it will be automatically isolated without affecting the system functionalities.

Up to 32 **IDA8's** can be connected together onto the same **LOCAL or GLOBAL** network. As the Network addresses are auto-negotiated, the network set up is very easy. Once programmed the system will be able to work independently (off-line) without the PC.

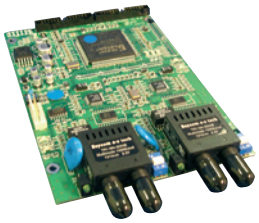
IDA8 comes standard with **IDA NET-1 cards, RJ45 to RJ45**, with a standard installation distance of 100 m between Master and Slave and/or Slave and Slave. For bigger installation distances, optional **IDA NET-2-3 and 4** can be used to extend distance for up to 2 km between units.

IDA NET1

Dedicated ethernet networking card with 2 x RJ45 (comes standard with IDA8C and IDA8S).

IDA NET3

Optional dedicated ethernet networking card with 2 x fiber, (port A + port B).



IDA NET2

Optional dedicated ethernet networking card with 1x fiber (port A) + 1 x RJ45 (port B).

IDA NET4

Optional dedicated ethernet networking card with 1 x RJ45 (port A) +1 x fiber (port B).

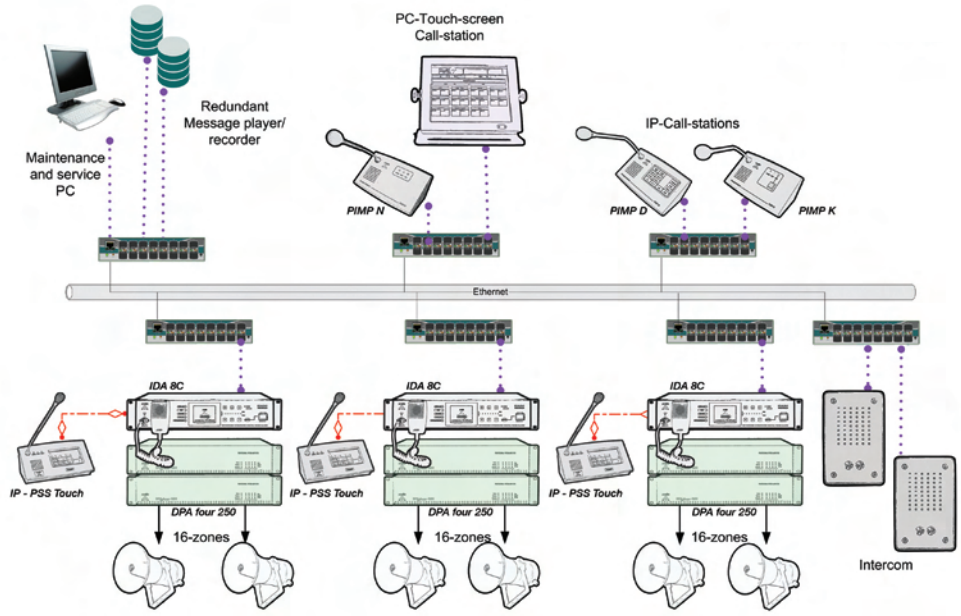
Port A = IN,
Port B = OUT

NETWORKING

COMPACT AUDIO SYSTEM - EN 54-16 compliant

The combination of ATEÏS TERRACOM@NET TCP/IP intercom with our VOX@NET all-in-one software will provide a whole new control and security environment. Users will have access to both intercom and paging features from the same call stations. Those call stations being either the PMIP-D or any PC in association with the PNIP-N station.

VOX@NET with IDA8



Additional TCP/IP audio and data break-in and break-out Network devices:

VNB, ATEÏS Media-streamer

VNB, media-streamer has been designed to suit simple point to point or point to multi-point audio and data gateways with no direct need for a PC. If it is for radio broadcasting, paging or a 2-way communication, the **VNB** can do it. Each **VNB** provides 2 audio input and 2 audio output channels using fast SPEEX-encoding or high quality MP3 - encoding.

Switching and indication contacts for system interfacing and a webserver for direct configuration access.The **ATEÏS VNB Media-streamer** enables low cost and low power audio distribution and communication using LAN or WAN (VPN).

(Future SIP compatibility will provide internet connectivity for VOIP applications).

VNB24-1
2 balanced 0 dB to -60 dB audio inputs, 2 balanced 0 dB audio outputs, one IP-address, and 4 switching contacts (2 in/2 out).

VNB24-2
4 balanced 0 dB to -60 dB audio inputs, 4 balanced 0 dB audio outputs, two IP-addresses, and 4 switching contacts (2 in/2 out).

VNB24-3
6 balanced 0 dB to -60 dB audio inputs, 6 balanced 0 dB audio outputs, three IP-addresses, and 4 switching contacts (2 in/2 out).

VNB24-4
8 balanced 0 dB to -60 dB audio inputs, 8 balanced 0dB audio outputs, four IP-addresses, and 4 switching contacts (2 in/2 out).

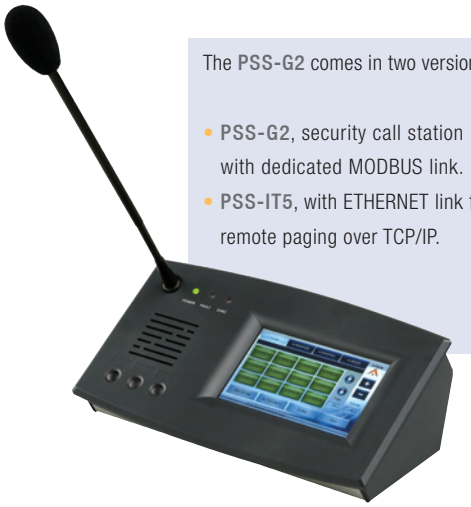
VOX@NET will add the following features to the integration

- Audio server with MP3 message/Musicfiles library. It can contain thousands of MP3 files for either background music or pre-recorded messages to be broadcasted into the TCP/IP network.
- Remote station status reporting global.
- Optional server and network redundancy.
- Visualization and recording (Log file) of events and Sinaps Remote systems faults.
- TCP/IP network address administration on VOX@NET server software.
- Microphone calls in any zone or group of zones of any IDA system.
- Broadcasting of pre-recorded messages in any zone or group of zones.
- Background music pre-recorded on server or played on external music source.
- Live recording of microphone calls to be broadcasted later on.
- Pre-recorded messages stacking. Up to 100 messages can be stacked.
- Message scheduler (time, day of the week, number of times.
- User management with up to 10 configurable and password protected profiles.
- IDA system administration with PCIDA4XM software.
- Recording on log file of calls, messages, and VOX@NET and IDA system faults.
- MODBUS protocol for third party control.

PAGING STATIONS

COMPACT AUDIO SYSTEM - EN 54-16 compliant

The security call stations have either a dedicated and secured audio and communication link or a TCP/IP communication link.



The **PSS-G2** comes in two versions:

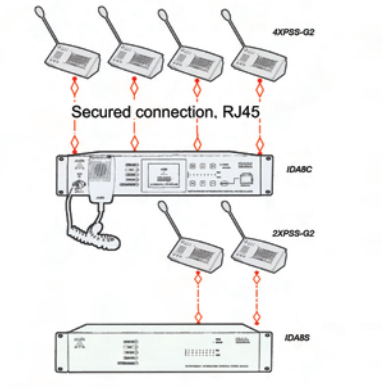
- **PSS-G2**, security call station with dedicated MODBUS link.
- **PSS-IT5**, with ETHERNET link for remote paging over TCP/IP.

PSS-G2

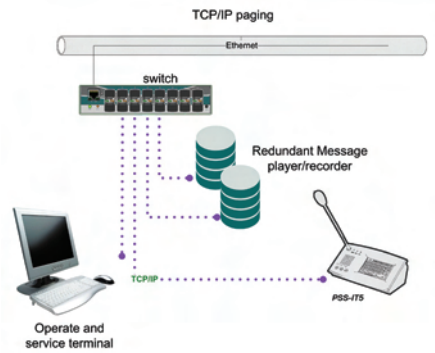
The **PSS-G2** Touch paging microphone console is a man-machine interface which allows paging call, messages broadcasting and DSP matrix parameter control. **IDA8** can handle up to 4 **PSS-G2** units connected to a secured bus. Its back-lit touch screen is designed for simple and user-friendly operating. The 3-hardware-keys can be freely assigned within the **IDA8 control software**. Various operating levels with password protection make the **PSS-G2** a versatile device that fits well in a commercial shopping center as for an industrial high security environment.

All paging parameters needed for site operating can be programmed: zones assigned to the different buttons, name of zones, group of zones, messages triggering, levels adjustments and pre-call chime but also for fader control, button control or event control.
The message and the chime are stored into the **PSS-G2**.
A total of 30 keys on three pages allow zone or group of zones selections. Each key contains a green colour changing field indicating that the zone is occupied by a different process.

Example with PSS-G2



Example with PSS-IT5



PSS CHARACTERISTICS

- 5" TFT full colour touch-screen
- 3 LED indicators: Power/General Fault/Evacuation active
- 3 key-buttons: User definable using ATEIS Studio GUI
- Console size: (L x W x D) 250 x 140 x 80 mm
- Microphone flex length: 280 mm
- Weight: 1098 g
- Colour: RAL 7016
- Front tilted at 30°
- Material: metal back, PVC top and sides

PSMxx:

Unidirectional Condenser Addressable Microphone, compatible with **IDA8C** and **IDA8S** devices via RS485 protocol over a single CAT5 cable connection to transport both Audio and Power to the PSMxx from the IDAxx system. The unit comprise of 8 zones / 8 button with sleek Condenser Goose Neck Microphone, and spring metal protection, providing durability and excellent aesthetic to 256 zones expansion via the additional Key-pad easy extension station. The buttons can be represent a single zone or group of zones and easily defined via the GUI of the **IDAxx system** via a simple Matrix selection.

The unit comprises as well "Hold" and "Busy" LED signals apart from the zone LED's, these shall allow the identification of selection / Busy signals for the user notification.

All buttons can be programmed with Drag & Drop features from the LAP GUI software and each button can be programmed for Push to Talk or Latch functionality.The Unidirectional Condenser Microphone means high quality directive pick up from the user and hence less interference from the surroundings thanks to the Cardio Polar Reception Patten.

The **IDAxx system** can accommodate up to 32 PSM microphone on one **IDAxx** and up to 256 zones in total, the RS485 communication protocol means daisy chain of up to 1000 m on a simple CAT5 cable, and yet making outlets easy to connect via a standard RJ45 connectors.

Main Features: - 8 paging programmable keys with status and 1 All call button

PSMxx CHARACTERISTICS

- Base dimensions (HxWxD): 200 x 107 x 345 mm
- Weight: Approx.0.55 kg
- Colour: FrenchGrey
- Gooze-neck length with mic.: 300 mm
- Cable length: 900 m
- Comes standard with Junctionbox (JB) and CAT5 cable (1.5 m).

AMPLIFIERS - CHARGER

COMPACT AUDIO SYSTEM, EN 54-16 compliant

Security Amplifiers, EN 54-16

The **DPAxx** is a 2U high 19" rack mountable, 4-channel class-D power amplifier, transformer isolated for 100 V, 70 V and 50 V distributed loudspeaker systems. Each channel can deliver up to 250 Watt when used as separate channel or can be combined with other channels to deliver a multiple of 125 or 250 Watt.

This amplifier has a dual voltage mains 110/230 VAC and a 24 VDC battery back-up input which allows it to be used in combination with a battery backup system for maximum availability and durability in an emergency evacuation system. There are 3 types of power amplifiers available in the **ATEIS IDA8** family range of products.

DPAxx CHARACTERISTICS

- DPA four 125: 4 x 125 Watt class-D power amplifier. Can be bridge into 2 x 250 W.
- DPA four 250: 4 x 250 Watt class-D power amplifier. Can be bridge into 2 x 500 W.
- DPA single 1000: 1 x 1000 Watt class-D power amplifier.
- DPAxx are 2U high, 19-inch rack mountable.
- Quiescent current in sleep mode: 30 mA (1000 W).
- Front panel indicators include:
  General status: Mains, Battery and General health
  Detailed status: Signal, Clip and Ready (Ready = out of sleep mode).
- 100 / 70 / 50 Volt available via terminal blocks at the rear.
- Output channels can be linked into 2 x 250 W or 2 x 500 W by daisy-chaining 50 V tapping (input on parallel).
- DPAxx series combines with the BECS-240-1000 charger and back-up supply.

DPA four 125
4 x 125 Watt class-D power amplifier

DPA four 250
4 x 250 Watt class-D power amplifier

DPA single 1000
1 x 1000 Watt class-D power amplifier

Security Battery back-up supply and charger, EN 54-16

The **BECS-240-1000** is a combined security battery charger and backup supply for the **DPAxx family** of products. The **BECS** provides power backup during mains failure to a maximum of 6 **DPAxx** power amplifiers and 1 backup power amplifier. The **BECS** is equipped with heavy duty power connectors and an isolated main battery entry for extra safety during installation.

Beside a charger for a 240 AH 24 VDC battery, the **BECS** is also equipped with a separate 1000 Watt 24 VDC power supply that acts as redundant backup for the individual **DPAxx power amplifiers** in case of an internal power supply failure. This way the batteries are secured for emergency applications only with a maximum availablility on the amplifiers.

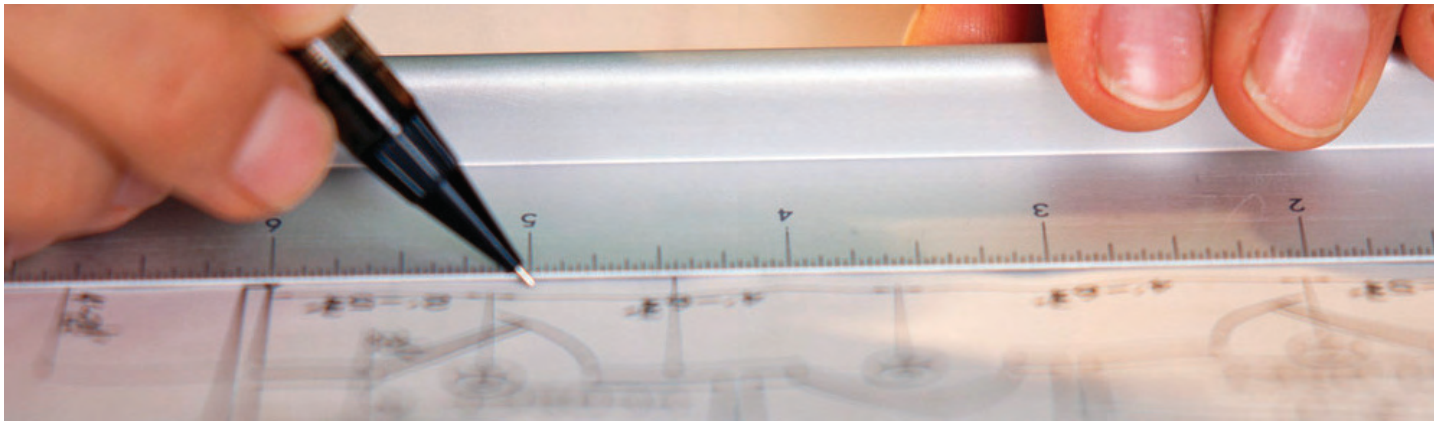
BECS-240-1000
Combined backup powersupply for up to 6 DPAxx and battery surveillance and charger unit.

BECS-240-1000 CHARACTERISTICS

- 2 U high, 19-inch rack mountable.
- Battery capacity: 240 AH.
- 6 x 24 VDC secured outputs for DPAxx power amplifiers.
- 1x 24 VDC secured output for DPAxx back-up power amplifier.
- 3 x 24 VDC output for IDA8xx.
- Redundant 1000 W / 24 VDC powersupply.
- Separate Charger for 240 AH battery.

ATEIS STUDIO

INTEGRATED SOFTWARE PLATFORM



ATEIS STUDIO™ user friendly Graphical User Interface (GUI)

ATEIS-Studio™ allows complete audio systems with a multitude of similar or different devices to be configured, supervised and controlled centrally from a single user interface. **ATEIS-Studio™** supports all IP-based products with the ATEIS product family such as **IDA™, LAP™, Messenger™ and Terracom™** .
ATEIS-Studio™ is open for further implementations in the future. **ATEIS-Studio™** also integrates power-amplifiers, microphone consoles and IP-remote controllers such as **PSS-touch, URC200 and 300**. It supervises, controls, log's and reports.

The whole system configuration can be stored and reloaded at the push of a button (Preset), depending upon the application. Customers can design their own graphic user interface or control panel(s) program automatic sequences (Events) and create different levels of user groups. (Security).

ATEIS-Studio™ provides a complete set of tools and building blocks for real-time control, monitoring and design of an audio system or Voice Evacuation system from paging desk to loudspeaker. Detailed information such as signal levels, Loudspeaker impedance, pre-recorded messages, amplifier conditions and other parameters can be monitored in real-time.

A library of control and monitoring elements, (GUI) graphical user interface, are provided and includes items such as volume control faders, various metering, high level EQ,

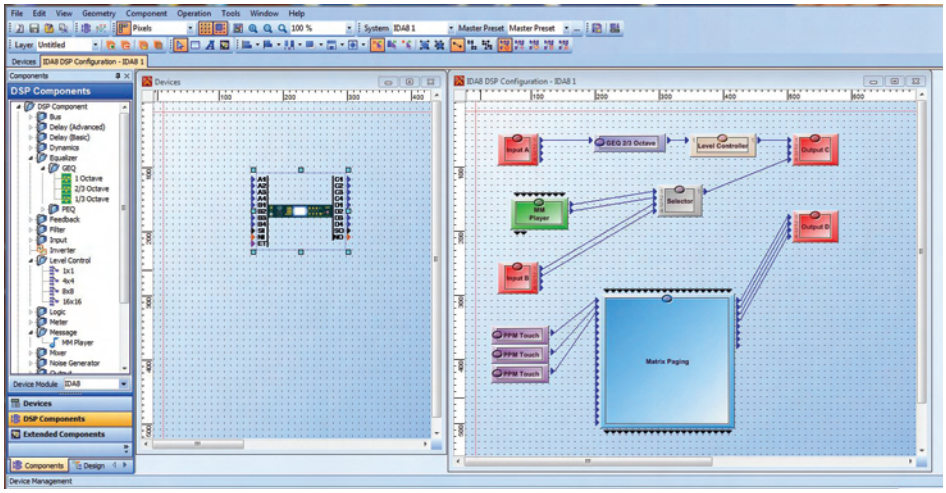
Compression, Limiting, Auto-Gain, Noise-sensing, Mixing, quick-buttons and display elements. The behaviour of these elements are completely configurable for customer control design.

The combination of these GUI tools allows a user to create a control surface that is effective, easy to operate regardless of the user's technical knowledge. Additional security is available through the use of password protected layers according to the **EN 54-16**.

Multiple users can be created within **ATEIS-Studio™**, each with a unique password and access to specific layers of the GUI. This creates a control surface that is specific to the needs of any system designer and/or operators.

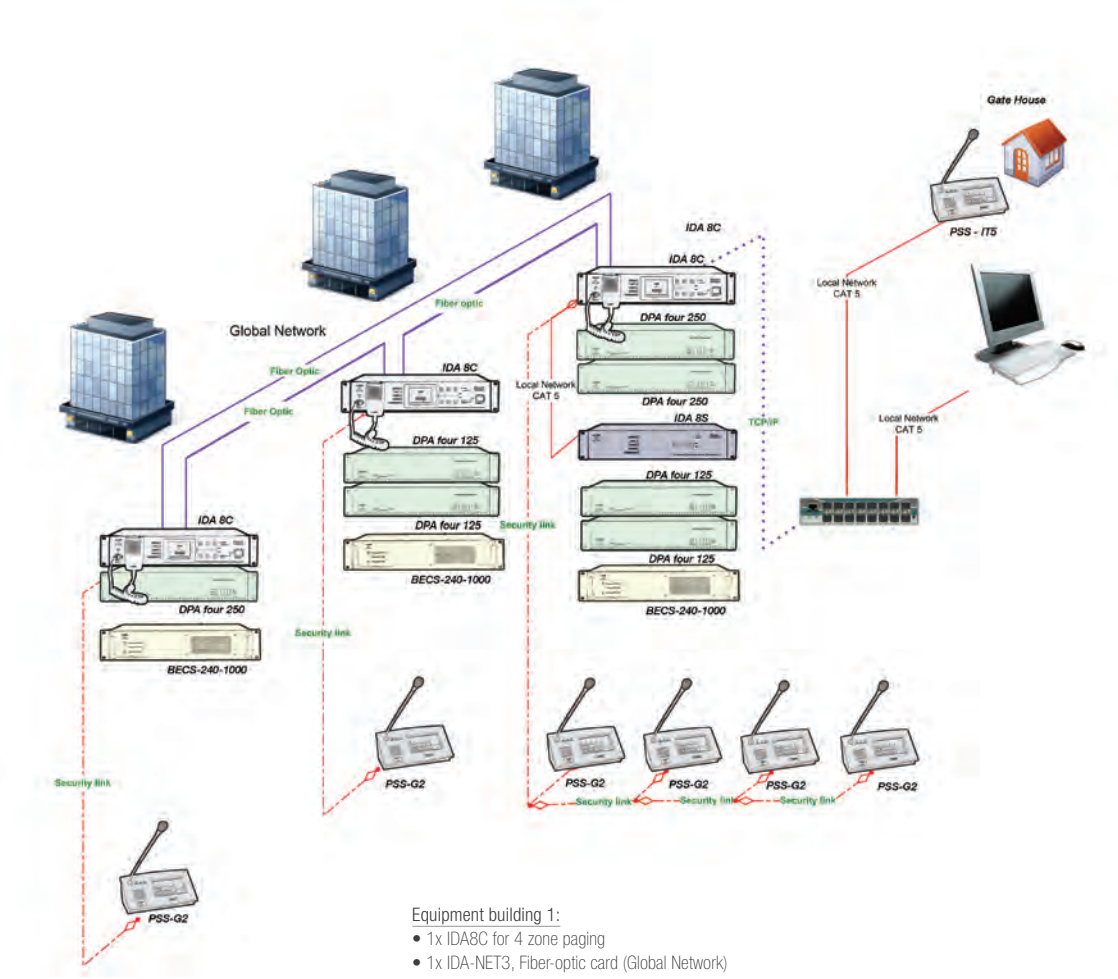
In addition you will find a comprehensive selection of tools for system design and programming using our ATEIS-Studio™ integrated software platform for all remote-controllable devices and systems.

Screenshot 1



Multiple Office buildings

EXAMPLE # 1



This example describes a PAVA system, VACIE, that is used for voice evacuation with an automatic link with a fire-panel system, FACIE.

The system is split into 3 rack systems, for each building one. Each building has the facility to do local and global paging. General calls and service calls are been delegated from the gate houses.

The overall connection between the buildings is based on a redundant fiber-optic core that carries up to 64-audio channels. The paging consoles are connected via a secured dedicated link with the central equipment racks.

A TCP/IP link from the main system to the Gate House establish the communication link with the Gate House paging desk. This paging desk can do all calls and zone-calls and has a feedback loudspeaker in the unit for system monitoring. The PC is for maintenance use.

Equipment building 1:
- 1x IDA8C for 4 zone paging
- 1x IDA-NET3, Fiber-optic card (Global Network)
- 1x DPAfour125, 4 zones
- 1x BECS-240-1000, Power & Battery back-up device
- 1x PSS-G2 Touch paging console

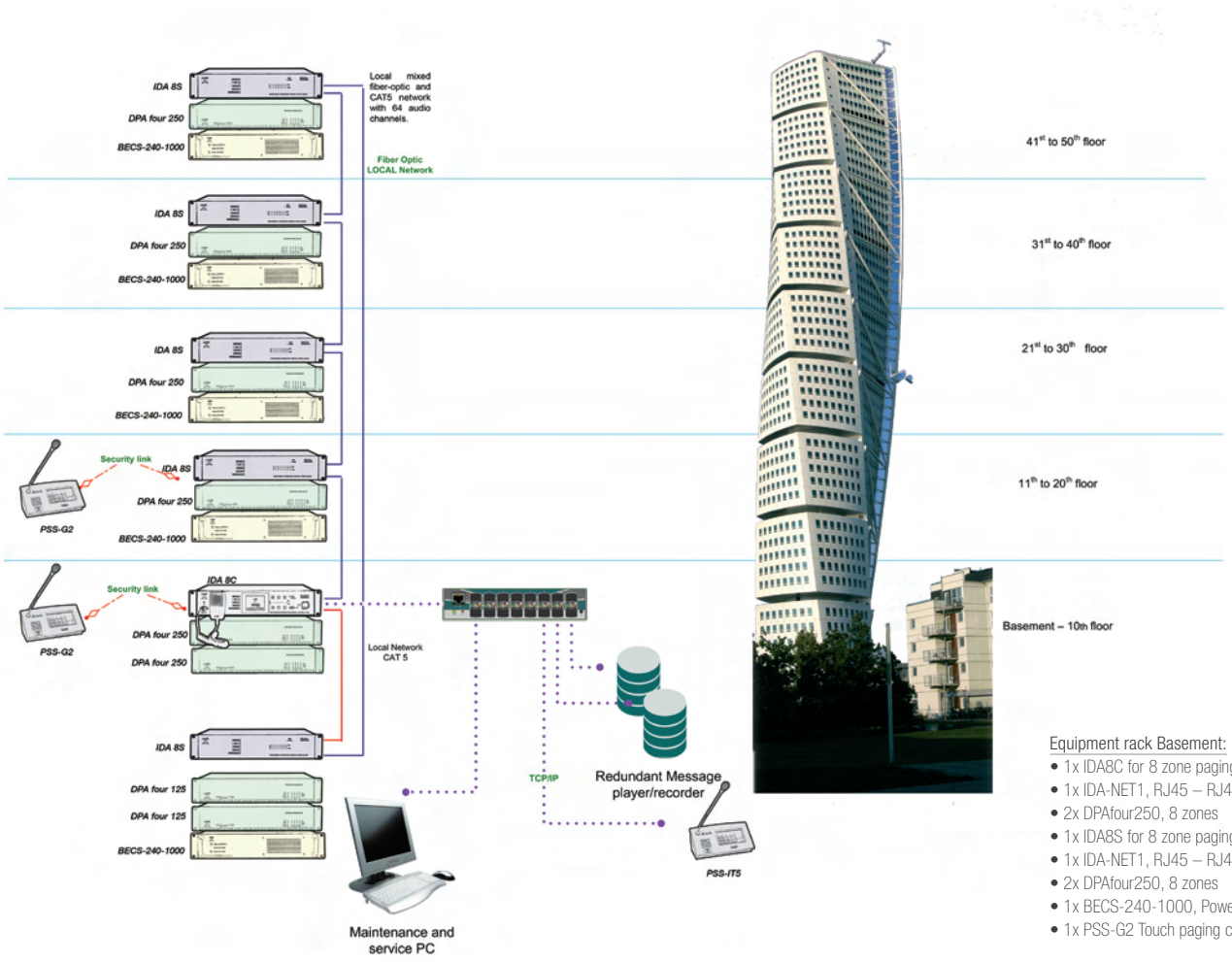
Equipment building 2:
- 1x IDA8C for 8 zone paging
- 1x IDA-NET3, Fiber-optic card (Global Network)
- 2x DPAfour125, 8 zones
- 1x BECS-240-1000, Power & Battery back-up device
- 1x PSS-G2 Touch paging console

Equipment building 3:
- 1x IDA8C for 8 zone paging
- 1x IDA-NET3, Fiber-RJ45 card (Global Network)
- 1x IDA-NET1, RJ45 – RJ45 (Local Network)
- 2x DPAfour125, 8 zones
- 1x IDA8S for 8 zone paging
- 1x IDA-NET1, RJ45 – RJ45 (Local Network)
- 2x DPAfour125, 8 zones
- 1x BECS-240-1000, Power & Battery back-up device
- 4x PSS-G2 Touch paging console

Equipment gate-house:
- 1x TCP/IP switch
- 1x IP-PSS-Touch paging console
- 1x PC-console

High-rise buildings with distributed sound

EXAMPLE # 2



Equipment rack Basement:
- 1x IDA8C for 8 zone paging
- 1x IDA-NET1, RJ45 – RJ45 (Local Network)
- 2x DPAfour250, 8 zones
- 1x IDA8S for 8 zone paging
- 1x IDA-NET1, RJ45 – RJ45 (Local Network)
- 2x DPAfour250, 8 zones
- 1x BECS-240-1000, Power & Battery back-up device
- 1x PSS-G2 Touch paging console

Equipment rack 11th to 20th floor:
- 1x IDA8S for 8 zone paging
- 1x IDA-NET1, RJ45 – RJ45 (Local Network)
- 1x DPAfour125, 8 zones
- 1x BECS-240-1000, Power & Battery back-up device
- 1x IP-PSS-G2 Touch paging console

Equipment rack 21th to 30th floor:
- 1x IDA8S for 8 zone paging
- 1x IDA-NET1, RJ45 – RJ45 (Local Network)
- 1x DPAfour125, 8 zones
- 1x BECS-240-1000, Power & Battery back-up device

Equipment rack 31th to 40th floor:
- 1x IDA8S for 8 zone paging
- 1x IDA-NET1, RJ45 – RJ45 (Local Network)
- 1x DPAfour125, 8 zones
- 1x BECS-240-1000, Power & Battery back-up device

Equipment rack 41th to 50th floor:
- 1x IDA8S for 8 zone paging
- 1x IDA-NET1, RJ45 – RJ45 (Local Network)
- 1x DPAfour125, 8 zones
- 1x BECS-240-1000, Power & Battery back-up device

This example describes a **PAVA system, VACIE**, that is used for voice evacuation with an automatic link with a fire-panel system, **FACIE, for high-rise building applications.**
The system contains a central rack that is based in the basement of the building and is covering for the first floors, central paging facilities and maintenance PC. This part of the system is also linked to the **FACIE**.

Since high-rise buildings suffer from power-loss in cables due to the long cable-lengths, **IDA8 Slave** with amplifiers are positioned decentralized and evenly divided between floors. This ensures the shortest routes between amplifiers and speakers. To connect the **IDA Slaves** with the **IDA Master** a combination of **IDA-NET cards** are used.

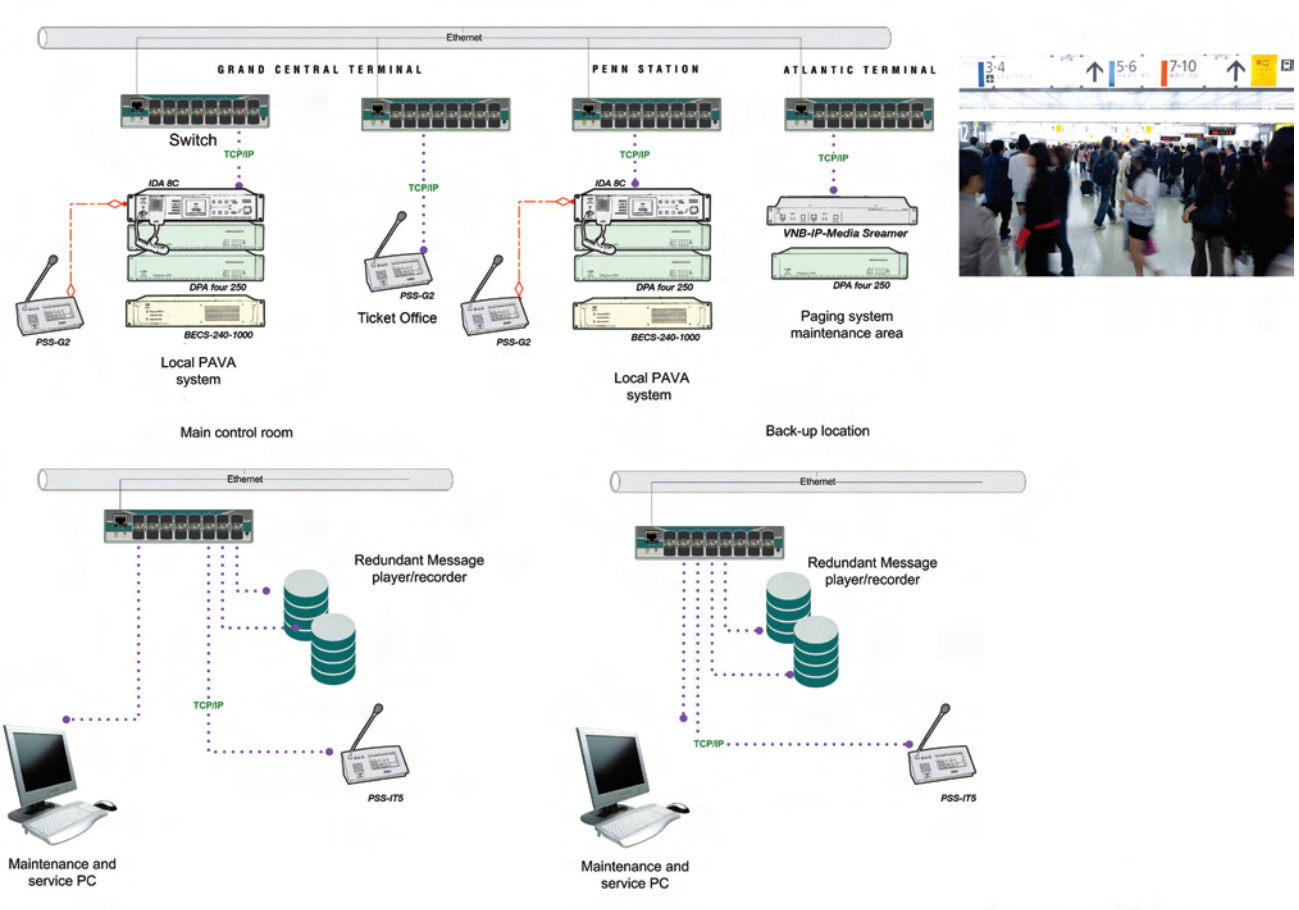
From the **IDA-Master** to the first slave Fiber to RJ45, from the first **IDA Slave** to the second and following, **IDA NET** RJ45 to RJ45 and the last **IDA8 Slave** will have **IDA NET** RJ45 to Fiber.

The overall connection between the floors is based on a redundant **IDA-Network** that carries up to 64-audio channels. The paging consoles are connected via a secured dedicated link with the central equipment racks.

A TCP/IP link from the main system to the SERVICE area is meant for maintenance use and remote access. The paging desk can do all calls and zone-calls and has a feedback loudspeaker in the unit for system monitoring.

Railway information PAVA

EXAMPLE # 3



This example describes a **PAVA system, VACIE**, that is used for voice evacuation with an automatic link with LOCAL fire-panel system, **FACIE, for a Railway applications** or systems where security needs to be combined with multiple remotely positioned standalone **PA**-facilities over IP.

In the contrary to the examples 1, 2 and 3, this system does not contain a central equipment rack. The whole setup is based on multiple standalone and self-supporting **PA-VA** systems that are linked over a dedicated IP-Network.

Each system has a link to the local **FACIE** and contains a secured paging facility with power back-up. From other remote positions, general and selective calls can be made or automated messages can be played simultaneous over the IP-Network using **VOX@NET multi-point control software** that runs on a redundant PC with a back-up location elsewhere on the network.

The system also contains multiple non-secured **PSS-G2-E** IP-paging desks at various locations such as ticket locations or supervisor offices. It also provides **VNB-mediastreamers** used as break-out boxes for paging only in the train maintenance area along the track.

A remotely positioned PC with a redundant message-player provides services and automated messages.

Decentralized Equipment rack 1 and 3 (typical):
- 1x IDA8C for 8 zone paging
- 2x DPAfour250, 8 zones
- 1x BECS-240-1000, Power & Battery back-up device
- 1x PSS-G2 Touch paging console

Remote paging consoles:
- 1x PSS-G2 E Touch paging console

Remote paging locations:
- 1x VNB-24-1, TCP/IP 2 audio in and 2 audio out mediastreamer.
- 1x DPAfour250, 4 zones